

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 1-4, 12-16, 24, and 31, without prejudice or disclaimer, AMEND claims 5-11, 17, 21, 23, 25, 29, and 30 and ADD new claims 32-41 in accordance with the following:

1-4 CANCELLED

5. (CURRENTLY AMENDED) ~~The method of driving a display device as claimed in claim 3, wherein~~ A method of driving a display device by constructing one frame with a plurality of subframes to display an input image that moves on a display panel, comprising:

assuming a specific pixel formed on the retina based on the input image;

assuming tracks of each pixel formed on the retina based on a move of the input image;

and

controlling light emission of each subframe, corresponding to the tracks substantially included in an area of the specific pixel on the retina, based on a move direction and a speed of motion of the input image that moves on the display panel, such that luminance of the specific pixel on the retina becomes substantially equal to the luminance of a pixel corresponding to the input image, wherein a pitch of pixels on the retina in the light emission area of each subframe that is used for displaying the specific pixel on the retina, is made shorter than a pitch of pixels on the display panel.

6. (CURRENTLY AMENDED) The method of driving a display device as claimed in claim 5, ~~wherein~~ further comprising:

selecting the pitch of the pixels on the retina ~~are selected~~ as one half of the pitch of the pixels on the display panel.

7. (CURRENTLY AMENDED) The method of driving a display device as claimed in claim 6, ~~wherein~~ further comprising:

providing two sets of N subframes per one frame period for the pixels on the display panel when one frame of the pixels on the retina is constructed of the N subframes, ~~two sets of the N subframes are provided per one frame period, for the pixels on the display panel.~~

8. (CURRENTLY AMENDED) The method of driving a display device as claimed in claim 7, wherein further comprising:

providing one set of the N subframes ~~are provided~~ for each of a front half and a latter half of the one frame period; for the pixels on the display panel.

9. (CURRENTLY AMENDED) The method of driving a display device as claimed in claim 5, wherein further comprising:

limiting the pitch of the pixels on the retina ~~is limited by~~ using the speed of motion of the image that moves on the display panel, and a number of redundant light-emitting blocks of subframes that constitute forming the one frame.

10. (CURRENTLY AMENDED) The method of driving a display device as claimed in claim 9, wherein further comprising:

selecting the redundant light-emitting blocks ~~are selected~~ based on light-emitting blocks located either at the near of or far from one end of the specific pixel on the retina, with priority.

11. (CURRENTLY AMENDED) The method of driving a display device as claimed in claim 9, wherein further comprising:

selecting the redundant light-emitting blocks ~~are selected~~ based on light-emitting blocks located either at ~~the~~ a beginning or at ~~the~~ an end of one frame period ~~for displaying to display~~ the specific pixel on the retina, with priority.

12-16 CANCELLED

17. (ORIGINAL) A display device displaying an input image that moves on a display panel by constructing one frame with a plurality of subframes, comprising:


an assuming unit assuming a specific pixel on a retina based on the input image and assuming tracks of each pixel formed on the retina based on move of the input image; and a control unit controlling light emission of each subframe, corresponding to the tracks substantially included in an area of the specific pixel on the retina, based on a move direction

and a speed of motion of the input image that moves on the display panel, such that luminance of the specific pixel on the retina becomes substantially equal to the luminance of a pixel corresponding to the input image.~~The display device as claimed in claim 15,~~ wherein a pitch of pixels on the retina in the light emission area of each subframe that is used for displaying the specific pixel on the retina, is made shorter than a pitch of pixels on the display panel.

18. (ORIGINAL) The display device as claimed in claim 17, wherein the pitch of the pixels on the retina are selected as one half of the pitch of the pixels on the display panel.

19. (ORIGINAL) The display device as claimed in claim 18, wherein when one frame of the pixels on the retina is constructed of N subframes, two sets of the N subframes are provided per one frame period, for the pixels on the display panel.

20. (ORIGINAL) The display device as claimed in claim 19, wherein one set of the N subframes are provided for each of a front half and a latter half of the one frame period, for the pixels on the display panel.

 21. (CURRENTLY AMENDED) The display device as claimed in claim 17, further comprising:

a limiting unit limiting the pitch of the pixels on the retina ~~by~~ based on the speed of motion of the image that moves on the display panel, and a number of redundant light-emitting blocks of subframes ~~that constitute~~ forming the one frame.

22. (ORIGINAL) The display device as claimed in claim 21, further comprising:
a selecting unit selecting the redundant light-emitting blocks based on light-emitting blocks located either at the near of or far from one end of the specific pixel on the retina, with priority.

23. (CURRENTLY AMENDED) The display device as claimed in claim 21, further comprising:

a selecting unit selecting the redundant light-emitting blocks based on light-emitting blocks located either at ~~the~~ a beginning or at ~~the~~ an end of one frame period for displaying the specific pixel on the retina, with priority.

24. CANCELLED

25. (CURRENTLY AMENDED) A display device displaying an input image that moves on a display panel by constructing one frame with a plurality of subframes, comprising: an assuming unit assuming a specific pixel on a retina based on the input image; and a control unit controlling light emission of each subframe such that luminance of the specific pixel on the retina becomes substantially equal to the luminance of a pixel corresponding to the input image~~The display device as claimed in claim 13, wherein slits are provided at light-extracting portions of each light-emitting cell that constitutes the display panel, thereby to limit the effective area of the light-extracting portions.~~

26. (ORIGINAL) The display device as claimed in claim 25, wherein the slits are formed substantially in a horizontal direction with respect to the light-emitting cells.

27. (ORIGINAL) The display device as claimed in claim 25, wherein the slits are formed substantially in a vertical direction with respect to the light-emitting cells.

28. (ORIGINAL) The display device as claimed in claim 25, wherein the slits are formed in a cross shape by combining substantially horizontal and vertical directions with respect to the light-emitting cells.

29. (CURRENTLY AMENDED) A display device displaying an input image that moves on a display panel by constructing one frame with a plurality of subframes, comprising: an assuming unit assuming a specific pixel on a retina based on the input image; and a control unit controlling light emission of each subframe such that luminance of the specific pixel on the retina becomes substantially equal to the luminance of a pixel corresponding to the input image~~The display device as claimed in claim 13, wherein a light-shielding dielectric is provided on a substrate in order to form the slits, the light-shielding dielectric has and comprises a black color at an observer side, and the light-shielding dielectric has a white color at a side opposite to the observer side.~~

30. (ORIGINAL) The display device as claimed in claim 29, wherein an ultraviolet-ray excitation phosphor is coated on an inner wall surface of the light-shielding dielectric.

31. CANCELLED

32. (NEW) A method of displaying a halftone image on a display panel by dividing one frame of the halftone image into a plurality of subframes each having a specific sustain discharge period to provide a specific intensity level, light emission of each subframe being controlled such that luminance of a pixel on a retina becomes substantially equal to the luminance of a pixel corresponding to an input image based on a move direction and a speed of motion of the input image that moves on the display panel, comprising the steps of:

preparing at least two subframes having the same intensity level in the plurality of subframes, where one halftone image is represented by at least two patterns of light-emitting subframes;

determining one pattern of light-emitting subframes by selecting subframes located close to a portion of a specific pixel on the retina; and

controlling light emission of subframes in the determined one pattern based on positioning information of the subframes in the specific pixel on the retina, with priority, when the at least two subframes having the same intensity level are included in an area of the specific pixel on the retina.

33. (NEW) The method of displaying a halftone image as claimed in claim 32, wherein the light emission of the subframes in the determined one pattern is controlled based on sequential subframes, with priority, when the positioning information of the at least two subframes having the same intensity level is the same.

34. (NEW) The method of displaying a halftone image as claimed in claim 32, wherein the light emission of the subframes is controlled such that luminous colors of the specific pixel on the retina become substantially equal to luminous colors of the corresponding pixel in the input image.

35. (NEW) A method of displaying a halftone image on a display panel by dividing one frame of the halftone image into a plurality of subframes each having a specific sustain discharge period to provide a specific intensity level, comprising the steps of:

preparing M sets of N subframes in the one frame;

setting a pitch of virtual pixels on the retina to 1/M-th pitch of real pixels on the display panel;

determining light emission of subframes to the virtual pixels on the retina based on a move direction and a speed of motion of the real pixels on the display panel; and

controlling luminance of a virtual pixel on the retina having the $1/M$ -th pitch of real pixels on the display panel to become substantially equal to the luminance of a pixel corresponding to an input image.

36. (NEW) The method of driving a display device as claimed in claim 35, wherein M is two and the pitch of the virtual pixels on the retina is a half of the pitch of the real pixels on the display panel, the two sets of N subframes are symmetrically provided for a front side and a later side of the one frame.

37. (NEW) A display device displaying a halftone image by dividing one frame of the halftone image into a plurality of subframes each having a specific sustain discharge period to provide a specific intensity level, light emission of each subframe being controlled such that luminance of a pixel on a retina becomes substantially equal to the luminance of a pixel corresponding to an input image based on a move direction and a speed of motion of the input image that moves on the display panel, comprising:

a preparing unit preparing at least two subframes having the same intensity level in the plurality of subframes, where one halftone image is represented by at least two patterns of light-emitting subframes;

a determining unit determining one pattern of light-emitting subframes by selecting subframes located close to a portion of a specific pixel on the retina; and

a controlling unit controlling light emission of subframes in the determined one pattern based on positioning information of the subframes in the specific pixel on the retina, with priority, when the at least two subframes having the same intensity level are included in an area of the specific pixel on the retina.

38. (NEW) The display device as claimed in claim 37, wherein the controlling unit controls the light emission of the subframes in the determined one pattern based on sequential subframes, with priority, when the positioning information of the at least two subframes having the same intensity level is the same.

39. (NEW) The display device as claimed in claim 37, wherein the controlling unit controls the light emission of the subframes such that luminous colors of the specific pixel on the

retina become substantially equal to luminous colors of the corresponding pixel in the input image.

40. (NEW) A display device displaying a halftone image by dividing one frame of the halftone image into a plurality of subframes each having a specific sustain discharge period to provide a specific intensity level, comprising:

a preparing unit preparing M sets of N subframes in the one frame;

a setting unit setting a pitch of virtual pixels on the retina to 1/M-th pitch of real pixels on the display panel;

a determining unit determining light emission of subframes to the virtual pixels on the retina based on a move direction and a speed of motion of the real pixels on the display panel; and

a controlling unit controlling luminance of a virtual pixel on the retina having the 1/M-th pitch of real pixels on the display panel to become substantially equal to the luminance of a pixel corresponding to an input image.

41. (NEW) The display device as claimed in claim 40, wherein M is two and the pitch of the virtual pixels on the retina is a half of the pitch of the real pixels on the display panel, the two sets of N subframes are symmetrically provided for a front side and a later side of the one frame.
